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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,132	11/15/2006	Bernd Bruchmann	280143US0PCT	2494

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EXAMINER	
LEONARD, MICHAEL L	
ART UNIT	**PAPER NUMBER**
1796	

NOTIFICATION DATE	DELIVERY MODE
07/06/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/556,132	BRUCHMANN ET AL.	
	Examiner	Art Unit	
	MICHAEL LEONARD	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-13,19 and 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 8-13, and 19-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-6, 8-13, and 19-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent No. 5,977,284 to Reich et al. in view of U.S. Patent No. 6,376,637 to Bruchmann et al. for the reasons set forth in the last Office action.

Claims 1-6, 8-13, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,786,682 to Perez in view of U.S. Patent No. 6,376,637 to Bruchmann et al. for the reasons set forth in the last Office action.

Response to Arguments

Applicant's arguments filed 05/05/2010 have been fully considered but they are not persuasive.

With regards to U.S. Patent No. 5,977,284 to Reich et al. in view of U.S. Patent No. 6,376,637 to Bruchmann et al. the applicants' argue that the claimed invention has not been rendered obvious by Reich ('284) in view of Bruchmann ('637) for 2 reasons.

1) The Reich reference fails to disclose or suggest the formation of polyester (meth)acrylates having at least one tertiary nitrogen atom and at least two hydroxyl groups having differing reactivity.

2) The references are directed to different fields of polyurethane chemistry.

In response to issue 1) the applicants' suggest that there is a weak disclosure in the Reich reference with regards to the polyester (meth)acrylates having at least two hydroxyl groups having differing reactivity. The fact that there is any disclosure at all in the Reich reference renders the claims obvious "a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments." *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). Furthermore, the Reich reference clearly discloses that the Michael Adducts have from 1 to 6 free hydroxyl groups and that the hydroxyl groups are introduced into the molecular by means of the hydroxyl-containing amino groups and the rest can be introduced from polyester (meth)acrylate reactant. Therefore, it would apparent from the instant disclosure as well as the disclosure of Reich that the reaction product of a polyester(meth)acrylate containing hydroxyl groups with an alkanolamine would produce a tertiary nitrogen containing reactant with having at least two hydroxyl groups of differing reactivity, as evidenced by the instant disclosure.

The Reich reference different reactant possibilities for the Michael Adduct, as such a prima facie case of obviousness exists over the combination. Though picked from a laundry list, it has been held that though a specific embodiment is not taught as preferred makes it no less obvious, also, the mere fact that a reference suggests a multitude of possible combinations does not in and of itself make any one of those combinations less obvious, see Merck v. Biocraft, 10 USPQ2d 1843 (Fed Cir 1985).

In response to issue 2) it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both references are related to polyurethane chemistry and the fact that the two cited references produce polyurethanes with different properties does not suggest that they are non-analogous art. Furthermore, from teachings of Bruchmann which suggests exploiting the differences in the reactivity of the isocyanate groups of diisocyanates or polyisocyanates or of the functional groups in the compounds which are reactive toward isocyanates in order to control a selective buildup of the polymers and a person of ordinary skill in the art could have applied these teachings to the Reich reference because Reich discloses from a list of possible reactants, an isocyanate-Reactive component with different hydroxyl reactivities. Finally, the process is known and selecting known isocyanate-reactive reactants to produce a dendrictic molecule is not novel unless the specifics of a the isocyanate reactive components are disclosed.

With regards to U.S. Patent No. 4,4786,682 to Perez et al. in view of U.S. Patent No. 6,376,637 to Bruchmann et al. the applicants' argue that the claimed invention has not been rendered obvious by Perez ('682) in view of Bruchmann ('637) for 1 reasons.

1) A compound containing at least two hydroxyl groups of different reactivity is not suggested by the Perez reference.

The Perez reference in some situations wherein the Michael adduct as formed would contain a tertiary nitrogen and at least two hydroxyl groups of differing reactivity because the Perez reference discloses the same amine containing adducts as the instant disclosure as well as hydroxyl containing acrylate compounds, wherein the Michael Addition reactio between the two would result in a compound containing a tertiary nitrogen and a least two hydroxyl groups of differeing reactivity. Furthermore, Perez disclsoes that material containing amino groups or the material containing unsaturated moieites or both of these materials can contain hydroxyl groups (Column 2, lines 20-25). This statement alone suggests a Michael Addition reaction between alkanolamines and unsaturated moieties containing hydroxyl groups and as evidenced from the instant disclosure this reaction would produce a compound containing a tertiary nitrogen and a least two hydroxyl groups of differeing reactivity. The applicants' have not shown that this would not be the case and therefore is assumed by the examiner to occur. The fact that Perez fails to exemplify a compound containing a tertiary nitrogen and a least two hydroxyl groups of differeing reactivity does not conclude that the Michael Addition reactants would produce such a compound. The full disclosure of Perez suggests the same reactant as the instant claims and therefore renders the invention obvious in view of Bruchmann.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL LEONARD whose telephone number is (571)270-7450. The examiner can normally be reached on Mon-Fri 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Milton I. Cano/
Supervisory Patent Examiner, Art Unit 1796

/MICHAEL LEONARD/
Examiner, Art Unit 1796